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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/631,194	07/31/2003	David S. Smith	SAS-10002/29	2185
25006	7590	10/17/2005	EXAMINER	
GIFFORD, KRASS, GROH, SPRINKLE & CITKOWSKI, P.C			HANSEN, COLBY M	
PO BOX 7021			ART UNIT	
TROY, MI 48007-7021			PAPER NUMBER	

3682

DATE MAILED: 10/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/631,194

Applicant(s)

SMITH, DAVID S.

Examiner

Colby Hansen

Art Unit

3682

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. ____.  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>10102003</u> .  | 6) <input type="checkbox"/> Other: ____.                                    |

4✓

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-9 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. It is unknown how one in the art could utilize the claimed apparatus in such a way as to enable one skilled in the art to make and/or use the apparatus as a propulsion device. It is unknown how one in the art could make an apparatus of a closed system utilizing the unbalanced masses to generate sustainable vectored locomotion without external force.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear what the metes and bounds are of the term "non-reactive", as all initial forces, for propulsion or otherwise, have an equal and opposite reactive force.

***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-9 are rejected under 35 U.S.C. 101 because the disclosed invention is inoperative and therefore lacks utility insofar as pertains to applicant's implication throughout the disclosure that the device can produce motion without reacting against an outside force, and without expelling mass.

The present invention endeavors to create a sustainable linear force by generating thrust through unbalanced masses mounted on a guide and having means for creating a force imbalance. It is submitted however that such an operation violates basic physical law, including conservation of linear momentum and Newton's Law of Motion. Since all mass is completely recirculated within the system, there is no mass transfer and thus no momentum transfer between the system and its environment. More to the point, the claims violate Newton's third law which states "when two particles exert forces on each other, these forces are equal in magnitude, opposite in direction, and collinear"; with that in mind, the method would serve only to create a vibrating frame with a net movement of zero. Therefore, the device is considered inoperative.

The Patent and Trademark office is authorized to require evident to operability of an invention for which patent protection is sought. Consequently, in order to overcome the above rejection, applicant is required to demonstrate the operability of the apparatus by way of a working model incorporating the claimed structure.

*Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 5-6 and 9, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Bristow Jr. (US Pat. 5,156,058) in view of Oades (US Pat. 5,890,400).

Bristow Jr. (US Pat. 5,156,058) discloses a non-reactive propulsion device comprising a pair of unbalanced masses 17 rotatably supported at one end along a common axis 12; drive means rotating the unbalanced masses in opposing directions so that they are super-imposed twice during each full revolution.

However, Bristow Jr. (US Pat. 5,156,058) does not disclose individual unbalanced masses connected to arms rotating about a fixed gear in a planetary manner.

Regarding claims 1 & 5, Oades (US Pat. 5,890,400) discloses an arm 30,31 rotatably supported upon an axis 25, drive means for rotating the arm (not shown), an unbalanced mass 22,23 supported at the radially outer end of the arm 30,31, for rotation about an axis normal to the plane of rotation of the arm, means for rotating the unbalanced mass about the end of the arm.

Regarding claim 2, Oades (US Pat. 5,890,400) discloses a gear (supported on shafts 14,15) supported at the radially outer end of the arm 30, 31 and means for rotating the gear.

Regarding claim 3, Oades (US Pat. 5,890,400) discloses a fixed gear 12, centered about the common axis, which meshes with the rotational gear as the arm rotates about the axis.

Regarding claim 5, Oades (US Pat. 5,890,400) discloses a means for causing the unbalanced masses to rotate in a planetary manner about the axis.

Regarding claim 6, Oades (US Pat. 5,890,400) the drive means constitutes an electric motor powered by an electric source.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized the analogous art of the unbalanced mass/arm arrangement of Oades (US Pat. 5,890,400) for each of the counter rotating and counter synchronized masses of Bristow Jr. (US Pat. 5,156,058), so as to move the masses cyclically such that the distance from the first axis is at a maximum in the direction of propulsion and at a minimum in a direction opposite to the direction of propulsion, thereby maximizing the force vectoring effect, as suggested by Oades (US Pat. 5,890,400).

Furthermore, with regard to claim 9, implementation of the non-reactive propulsion device upon a space vehicle is an intended use recitation. A recitation directed to the manner in which a claimed apparatus is intended to be used does not distinguish the claimed apparatus from the prior art if the prior art has the capability to so perform (MPEP 2114 and Ex parte Masham, 2 USPQ 2<sup>nd</sup> 1647 (1987)). Bristow Jr. (US Pat. 5,156,058) is deemed capable of use upon a space vehicle.

Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bristow Jr. (US Pat. 5,156,058) in view of Oades (US Pat. 5,890,400), as applied to claims 1-3, 5-6, and 9, further in view of Claxton (US Pat. 5,557,988).

Bristow Jr. (US Pat. 5,156,058) discloses the claimed invention except for the use of electricity as a driving means derived by solar or nuclear means.

Claxton (US Pat. 5,557,988) discloses the use of battery, nuclear, or solar means of providing electricity to the propulsion driving means. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized the nuclear or solar electricity means of Claxton (US Pat. 5,557,988) within Bristow Jr. (US Pat. 5,156,058) as an obvious variant to battery power as well as to allow extended deployment (e.g. space), as suggested by Claxton (US Pat. 5,557,988).

### ***FACSIMILE TRANSMISSION***

Submission of your response by facsimile transmission is encouraged. Group 3600's facsimile number is (571) 273-8300. Recognizing the fact that reducing cycle time in the processing and examination of patent applications will effectively increase a patent's term, it is to your benefit to submit responses by facsimile transmission whenever permissible. Such submission will place the response directly in our examining group's hands and will eliminate Post Office processing and delivery time as well as the PTO's mail room processing and delivery time. For a complete list of correspondence not permitted by facsimile transmission, see MPEP. 502.01. In general, most responses and/or amendments not requiring a fee, as well as those requiring a fee but charging such fee to a deposit account, can be submitted by facsimile transmission. Responses requiring a fee which applicant is paying by check **should not be** submitting by facsimile transmission separately from the check.

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Responses submitted by facsimile transmission should include a Certificate of Transmission (MEP. 512). The following is an example of the format the certification might take:

I hereby certify that this correspondence is being facsimile transmitted to the Patent and

Trademark Office (Fax No. (703) 872-9306) on \_\_\_\_\_

(Date)

Typed or printed name of person signing this certificate:

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\_\_\_\_\_

(Signature)

If your response is submitted by facsimile transmission, you are hereby reminded that the original should be retained as evidence of authenticity (37 CFR 1.4 and MEP. 502.02). Please do not separately mail the original or another copy unless required by the Patent and Trademark Office. Submission of the original response or a follow-up copy of the response after your response has been transmitted by facsimile will only cause further unnecessary delays in the processing of your application; duplicate responses where fees are charged to a deposit account may result in those fees being charged twice.




*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Colby Hansen whose telephone number is (571) 272-7105. The examiner can normally be reached on Monday through Thursday and every other Friday from 7:30 PM to 5:00 PM (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley, can be reached on (571) 272-6917. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-2168.

Colby M. Hansen

Patent Examiner

 10/14/05



**RICHARD W. RIDLEY**  
~~PRIMARY EXAMINER~~

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